

U. S. Patent Application No. 10/694,659
Amendment dated June 8, 2007
Reply to Office Action of March 9, 2007

REMARKS/ARGUMENTS

Reconsideration and continued examination of the application are respectfully requested.

Claims 1-11, 16-19, and 21-30 are pending. Claims 1, 10, and 11 have been amended to further define the "first observation condition." Support for amended claims 1, 10, and 11 can be found in the present application and in the figures. Accordingly, no questions of new matter should arise and entry of this amendment is respectfully requested.

Summary of Interview with Examiner

The applicants and the undersigned appreciate the interview with Examiner Pritchett on May 2, 2007. In the interview, the cited references were discussed in view of the pending claims. Furthermore, amending the independent claims to further recite that the first observation condition has a pre-selected illumination direction was further discussed.

Further, as discussed in the interview, the applicants, to advance prosecution of this application, have amended claims 1, 10, and 11 to recite that the first observation condition(s) has a pre-selected illumination direction. At page 8 of the Office Action, the Examiner indicated that such a limitation would not be shown in the Asami. Further, in the interview, the Examiner indicated that this addition of a "pre-selected illumination direction" to independent claims 1, 10, and 11 would overcome the rejections in the Office Action dated March 9, 2007.

Rejection of Claims 1-11, 16-27 and 30 Under 35 U.S.C. §103(a) as Being Unpatentable Over Bacus et al. in View of Iwabuchi et al. and Asami

In the Office Action, at page 2, the Examiner rejects claims 1-11, 16-27, and 30 under 35 U.S.C. §103(a) as being unpatentable over Bacus et al. (U.S. Patent No. 6,396,941) in view of

U. S. Patent Application No. 10/694,659
Amendment dated June 8, 2007
Reply to Office Action of March 9, 2007

Iwabuchi et al. (U.S. Patent No. 6,541,771 B2) in further view of Asami (U.S. Patent No. 6,882,350). In the Office Action, the Examiner essentially relies on Bacus et al. and Iwabuchi et al. as in the previous Office Actions, arguing that Bacus et al. describes an observation apparatus using a plurality of first and second observation conditions. The Examiner further asserts that Iwabuchi et al. discloses simultaneously displaying different images obtained from different observation conditions on one display.

The Examiner admits that Bacus et al. fails to describe that the observation conditions include photographing observation images from distinct illumination directions. The Examiner, however, cites Asami to supply a teaching that the first observation conditions each include a respective distinct illumination direction, thus allegedly rendering the claimed invention obvious. The rejection is respectfully traversed.

The applicants do not agree with the Examiner's assertion that Asami describes a plurality of first observation conditions, each including a respective distinct illumination direction. Asami describes the archiving of digital images in association with a map of the physical area in which the images were taken, with the assistance of GPS location technology. Fig. 10 and col. 4, lines 10-17, of Asami, the part of the reference particularly cited by the Examiner, actually describes the displaying of a topographical map showing where different images were taken, with "arbitrary illumination direction data and shadow data associated with the illumination direction data," for illustrating the map. In other words, Asami does not describe the setting of different observation conditions, including mutually distinct illumination directions, for taking the digital photographs themselves. Asami instead describes the setting of illumination conditions for the terrain map displaying icons, those icons representing different places where photographs were taken.

Further, as recognized by the Examiner at page 8 of the Office Action, the arbitrary

U. S. Patent Application No. 10/694,659
Amendment dated June 8, 2007
Reply to Office Action of March 9, 2007

illumination directions allegedly described in Asami would not read on the claim language directed toward a pre-selected illumination direction. While the Examiner, at page 8 of the Office Action, indicated that such language is not present in the claims, to assist the Examiner and to advance prosecution of this application, this language has been included in claims 1, 10, and 11. Therefore, for this additional reason, the rejection should be withdrawn.

In addition, neither Bacus et al., Iwabuchi et al., nor their combination, even if the combination was proper, teaches or suggests a magnifying observation apparatus as claimed in claim 1. Claim 1 recites a magnifying observation apparatus including a "plurality of first observation images," each of the "plurality of first observation conditions including a distinct illuminating direction with respect to the observation subject." Claim 1 recites that each of the first observation images are "each acquired per a different one of the plurality of first observation conditions including a respective distinct illumination direction set with said first observation condition setting section."

The "plurality of first observation images" and "first observation conditions" recited in claim 1 stand in a one-to-one relationship, so that different first observation images correspond to different first observation conditions. Moreover, the apparatus of claim 1 includes a "first observation image display section for displaying" those "first observation images... simultaneously on the same display screen of said display section." The different first observation images that are simultaneously displayed therefore each derive from different first observation conditions, including "distinct illumination direction."

The Examiner indicated that Bacus et al. fails to teach or suggest "simultaneously displaying" images with different observation conditions, and cites Iwabuchi et al. to supply this deficiency. Neither Bacus et al., Iwabuchi et al., or their combination, even if the combination was

U. S. Patent Application No. 10/694,659
Amendment dated June 8, 2007
Reply to Office Action of March 9, 2007

proper, teaches or suggests an apparatus as claimed in claim 1. Bacus et al. describes a system in which a set of scanned images are assembled to generate a combined tiled image. The combined image can permit more convenient panning and viewing on a limited display screen. See, e.g., Bacus et al., col. 6, lines 17-53. Bacus et al. however fails to teach or suggest an apparatus as claimed in claim 1, including that the tiled images are "each acquired per a different one of the plurality of first observation conditions including a respective distinct illumination direction." Bacus et al. does not teach that any first observation conditions would be different for different tiles, nor that each of the first observation conditions include a "distinct illumination direction." Bacus et al. instead describes capturing images based on the same conditions, consistent with that reference's purpose of tiling scanned portions together to form a combined tiled image.

Iwabuchi et al., cited only to supply a teaching of "simultaneously displaying," likewise fails to teach or suggest any more of the apparatus claimed in claim 1 as Bacus et al. Iwabuchi et al. describes a scanning electron microscope having a view field range outside a display screen, using off-screen points for panning or enlargement. See, e.g., Iwabuchi et al. col. 3, lines 37-48. The electron microscope system of Iwabuchi et al. merely records a plurality of images at different positions on the specimen, and records those images in a storage unit (16). Then, one of the stored images can be selected, read, and displayed on a second display screen area. Iwabuchi et al. only teaches that a selected, single stored image can be displayed on the image display unit (15) simultaneously with an enlarged image of the overall specimen obtained on a real-time basis. Iwabuchi et al. thus fails to teach or suggest a plurality of first observation images based on a plurality of first observation conditions, which are simultaneously displayed on a display section. Iwabuchi et al. instead only displays one magnified part of the overall specimen as an image simultaneously with the overall image of the specimen on the same image display unit. Iwabuchi et

U. S. Patent Application No. 10/694,659
Amendment dated June 8, 2007
Reply to Office Action of March 9, 2007

al. further fails to describe a "distinct illumination direction" for each of the first observation conditions.

For these reasons, the rejection of claim 1 should be withdrawn. Claims 2-9, 16-19, 21-26, and 30 distinguish over Bacus et al. in view of Iwabuchi et al. and Asami et al. for at least the same reasons as claim 1 from which they depend. Applicant assumes that claim 19 was not intended to be rejected on this combination due to the separate rejection of claim 19 based on the combination noted below, however respectfully submits that claim 19 distinguishes over Bacus et al., Iwabuchi et al., and Asami et al., with or without further combination with Fairley et al. The rejection of claims 2-9, 16-19, 21-26, and 30 should be withdrawn.

Claims 10 and 11 (and claim 27) include similar limitations to claim 1, and distinguish over Bacus et al. in view of Iwabuchi et al. and Asami et al. for at least similar reasons. The rejection of the claims should be withdrawn.

Rejection of Claims 19, 28 and 29 Under 35 U.S.C. §103(a) as Being Unpatentable Over Bacus et al. in View of Iwabuchi et al. and Asami and Further in View of Fairley

The Examiner, at page 7 of the Office Action, rejected claims 19, 28, and 29 under 35 U.S.C. §103(a) as being unpatentable over Bacus et al. in view of Iwabuchi et al. and Asami, and further in view of Fairley (U.S. Published Application No. 2002/0118359).

Applicant respectfully traverses the rejection of claims 19, 28, and 29 as being unpatentable over Bacus et al. in view of Iwabuchi et al. and Asami, and further in view of Fairley, including the reasons discussed above and in the amendments filed September 28, 2006 and January 29, 2007, which are incorporated herein by reference. The Examiner cites the switchable laser source (523) of Fairley to supply a teaching of different angles of illumination, but Fairley fails to teach or

U. S. Patent Application No. 10/694,659
Amendment dated June 8, 2007
Reply to Office Action of March 9, 2007

suggest the deficiencies of Bacus et al., Iwabuchi et al., and Asami as noted above with respect to claims 1, 10, and 11 above. The rejection of claims 19, 28, and 29 are overcome for the same reasons. Accordingly, the rejection should be withdrawn.

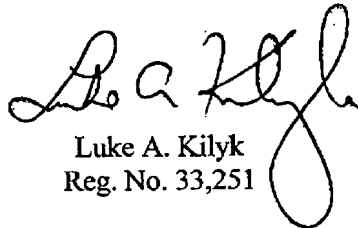
CONCLUSION

In view of the foregoing amendments and remarks, the applicant respectfully requests favorable reconsideration of the present application and a timely allowance of the pending claims.

Should the Examiner deem that any further action by applicant or applicant's undersigned representative is desirable and/or necessary, the Examiner is invited to telephone the undersigned at the number set forth below.

If there are any fees due in connection with the filing of this response, please charge the fees to Deposit Account No. 50-0925. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such extension is requested and should also be charged to said Deposit Account.

Respectfully submitted,



Luke A. Kilyk
Reg. No. 33,251

Attorney Docket No.: 3140-017
KILYK & BOWERSOX, P.L.L.C.
400 Holiday Court, Suite 102
Warrenton, VA 20186
Tel.: (540) 428-1701
Fax.: (540) 428-1720